

1. Apparatus for preventing the escape of natural, artificial, or therapeutic
2 material through a defect in the annulus fibrosis of a spinal disc, comprising:
a device having a first physical extent facilitating introduction of the device relative
4 to a defect in an annulus fibrosis, and
a second physical extent, different from the first, wherein the device functions to
6 occlude the defect.

2. The apparatus of claim 1, wherein:
2 the device is composed of flexible or compressible material;
the first physical extent is achieved by compacting the device; and
4 the second physical extent is achieved through expansion of the device.
5

3. The apparatus of claim 2, wherein the device includes a flexible screen or
2 patch.

4. The apparatus of claim 1, further including one or more anchors to hold the
2 device in place relative to the defect.

5. The apparatus of claim 1, wherein:
2 the device is provided as a liquid or gel which solidifies to achieve the second
physical extent.

6. The apparatus of claim 5, including a hydrogel or elastomer.
7. The apparatus of claim 1, wherein:
 - 2 the device is composed of material that naturally returns to a predetermined shape;
 - the first physical extent is achieved by straightening the device for introduction; and
 - 4 the second physical extent is achieved as the device returns to the predetermined shape.
8. The apparatus of claim 1, including a plurality of devices which function
 - 2 collectively to achieve the second physical extent.
9. The apparatus of claim 8, wherein the devices are introduced separately.
10. The apparatus of claim 1, wherein the device occludes the defect while
 - 2 allowing compression and distraction of the disc with respect to normal spinal movement.
11. The apparatus of claim 1, wherein the device incorporates a radio-opaque
 - 2 contrast material.
12. A method of preventing the escape of natural, artificial, or therapeutic
 - 2 material through a defect in the annulus fibrosis of a spinal disc, comprising the steps of:
inserting a device relative to a defect in an annulus fibrosis; and

- 4 occluding the defect by:
- a) allowing the device to expand to a larger size,
 - 6 b) allowing the device to return to a memorized shape,
 - c) allowing the device to solidify, or
 - 8 d) by adding additional devices which physically cooperate following
installation.

10

13. The method of claim 12, wherein:
- 2 the step of inserting device includes compacting the device into a compressed form
for introduction relative to the defect.

14. The method of claim 12, wherein the device includes a flexible screen or
- 2 patch.

15. The method of claim 12, further including the step of anchoring each device
- 2 in place relative to the defect.

16. The method of claim 12, wherein the device includes a liquid or gel
- 2 which solidifies following injection into the defective area.

17. The method of claim 16, including a hydrogel or elastomer.

BAF-11802/29
01008sh

18. The method of claim 12, wherein the device occludes the defect while
- 2 allowing compression and distraction of the disc with respect to normal spinal movement.